IN THE CLAIMS

The following listing of claims will replace all prior versions, and listings, of claims in this application.

Listing of claims:

1. (Currently Amended) ~~Process~~ A process for desulfurizing hydrocarbons which boil within the range of 35 to 250 °C, containing olefins and more than 150 ppm of sulfur~~, with possible skeleton isomerization of olefins, using a~~ comprising contacting the hydrocarbons with a catalyst in the presence of hydrogen, wherein the catalyst ~~which~~ comprises a metal of group VIII, a metal of group VI, a metal oxide as a carrier and a component A selected from the group consisting of:

a) ~~zeolite belonging to the FER type,~~ an FER zeolite in a quantity ranging from 5 to 30% by weight with respect to the total weight of the catalyst,

b) phosphorous in a quantity ranging from 0.1 to 10 % weight with respect to the total weight of the catalyst, and

c) mixtures thereof,

where when the component A is only phosphorous ~~either~~ the catalyst is obtained by one of the following processes:

(1) impregnating ~~impregnation of~~ the metal oxide carrier with an aqueous solution of H3PO4 followed by ~~impregnation with~~ impregnating an aqueous solution of the metal of group VIII and an aqueous solution of the metal of group VI, ~~or the catalyst is obtained by~~

(2) drying and calcination of a gel obtained mixing an alcohol dispersion containing a soluble salt of the metal of group VIII and an organic source of aluminum with an aqueous

solution containing a soluble salt of the metal of group VI and H3PO4, ~~or the catalyst is obtained by impregnation~~

(3) impregnating with an aqueous solution of H3PO4 of a gel, dried and calcined, obtained mixing an alcohol dispersion containing a soluble salt of the metal of group VIII and an organic source of aluminum with an aqueous solution containing a soluble salt of the metal of group VI.

2. (Currently Amended) Process The process according to claim 1 for desulfurizing hydrocarbons which boil within the range of 35 DEG to 250 DEG C, containing olefins and more than 150 ppm of sulfur , with skeleton isomerization of olefins, using a catalyst comprising a metal of group VIII, a metal of group VI, a metal oxide as carrier, and a wherein component A selected from is a a FER zeolite belonging to the FER type, in a quantity ranging from 5 to 30% by weight with respect to the total weight of the catalyst , and mixtures of said zeolite of FER type in a quantity ranging from 5 to 30% by weight with respect to the total weight of the catalyst, with phosphorous in a quantity ranging from 0.1 to 10 % weight with respect to the total weight of the catalyst.

3. (Currently Amended) The process according to claim 1 wherein the metal of group VIII is selected from the group consisting of Cobalt, Nickel and their mixtures.

4. (Currently Amended) e process according to claim 1 wherein the metal of group VI is selected from the group consisting of molybdenum, tungsten and their mixtures.

5. (Previously Presented) The process according to claim 3 wherein the metal of group VIII is cobalt and the metal of group VI is molybdenum.

6. (Currently Amended) The process according to claim 1 wherein the weight percentage of metal of group VIII varies is from 1 to 10% with respect to the total weight of the catalyst.

7. (Currently Amended) The process according to claim 6 wherein the weight percentage of metal of group VIII varies is from 2 to 6%.

8. (Currently Amended) The process according to claim 1 wherein the weight percentage of metal of group VI varies is from 4 to 20% with respect to the total weight of the catalyst.

9. (Currently Amended) The process according to claim 8 wherein the weight percentage of metal of group VI varies is from 8 to 13 %.

10. (Previously Presented) The process according to claim 6 wherein the molar ratio between the metal of group VIII and the metal of group VI is less than or equal to 2.

11. (Original) The process according to claim 10 wherein the molar ratio between the metal of group VIII and the metal of group VI is less than or equal to 1.

12. (Currently Amended) The process according to claim 1 wherein the metal oxide used as carrier is selected from the group consisting of silica, alumina, silico-aluminas, titania, zirconia and mixtures of thereof.

13. (Original) The process according to claim 12, wherein the metal oxide is alumina.

14. (Currently Amended) The process according to claim 1 wherein the catalyst comprises a FER zeolite of FER type selected from the group consisting of Ferrierite, FU-9, ISI-6, Nu-23, Sr-D, and ZSM-35.

15. (Original) The process according to claim 14 wherein the zeolite is ZSM-35.

16. (Currently Amended) The process according to claim 1, wherein the FER zeolite of FER type is in the form in which the cation sites are prevalently occupied by hydrogen ions.

17. (Currently Amended) The process according to claim 16, wherein at least 80% of the cation sites is are occupied by hydrogen ions.

18. (Previously Presented) The process according to claim 1, 2, 14 or 15, wherein the zeolite has Si/Al ratio < 20.

19. (Currently Amended) The process according to claim 1 wherein the catalyst contains FER zeolite of FER type as component A, and is prepared as follows:

a) preparing an alcohol dispersion is prepared, containing a soluble salt of the metal of group VIII, the FER zeolite of the FER type and an organic source of aluminum;

b) preparing an aqueous solution is prepared, containing a soluble salt of the metal of group VI and optionally formamide;

c) mixing the alcohol dispersion and the aqueous solution are mixed, obtaining to obtain a gel;

d) aging of the gel at a temperature ranging from 10 to 40 °C;

e) drying of the gel;

f) calcination of calcinating the gel.

20. (Original) The process according to claim 19, wherein in step a) the metal salt of group VIII is nitrate.

21. (Original) The process according to claim 19 wherein the organic source of aluminum is aluminum-trialkoxide having the formula (RO)3Al, wherein R is isopropyl or sec-butyl.

22. (Original) The process according to claim 19 wherein in step b) the soluble salt of the metal of group VI is an ammonium salt.

23. (Original) The process according to claim 19 wherein step e) is carried out at a temperature ranging from 80 to 120 °C.

24. (Original) The process according to claim 19, wherein step f) is carried out at a temperature ranging from 400 to 600 °C.

25. (Currently Amended) The process according to claim 1, wherein the catalyst contains a FER zeolite of FER type as component A, and is prepared by:

a) impregnation of impregnating a metal oxide carrier with an aqueous solution of metal of group VIII and an aqueous solution of metal of group VI,

b) drying and calcination of the material resulting from step a); and

c) mixing the impregnated metal oxide obtained from step b) with the FER zeolite of FER type.

26. (Original) The process according to claim 25 wherein the impregnated metal oxide from step b) is crushed and sieved in particles of <0.2 mm before the mixing in step c).

27. (Currently Amended) The process according to claim 26 wherein in the step c) metal oxide particles and the FER zeolite of FER type are dispersed in an organic solvent, then the solvent is vaporized and the so obtained catalyst is dried and calcined.

28. (Currently Amended) The process accordin according to claim 26 wherein in step c) metal oxide particles and FER zeolite of FER type are mixed in the presence of a binder and optionally of a combustible organic polymer, to obtain a mixture which is kneaded with a peptizing acid solution, extruded, dried and calcined, or pelletized, dried and calcined.

29. (Previously Presented) The process according to claim 1 or 2 wherein the catalyst contains phosphorous in a quantity ranging from 1 to 5 % wt with respect to the total weight of the catalyst.

30. (Currently Amended) The process according to claim 1 wherein the catalyst contains phosphorous as component A and is prepared by impregnation of impregnating the metal oxide carrier with an aqueous solution of H3PO4 followed by impregnation impregnating with an aqueous solution of the metal of group VIII and an aqueous solution of the metal of group VI, wherein the metal oxide carrier has a surface area lower than 240 m/g.

31. (Previously Presented) The process according to claim 1 carried out at a temperature ranging from 220 to 340 °C, at a pressure ranging from 5 to 20 Kg/cm, at a LHSV ranging from 1 to 10 h in the presence of hydrogen in a quantity ranging from 100 to 500 times with respect to the hydrocarbons present (Nl/l).

32. (Previously Presented) The process according to claim 1 wherein the hydrocarbons boiling within the range of 35 to 250 °C contain more than 1000 ppm of S.

33. (Previously Presented) The process according to claim 1 wherein hydrocarbons boiling within the range of 35 to 250 °C derive from cracking processes.

34. (Previously Presented) The process according to claim 1 wherein the catalyst is in extruded form.

35. (Previously Presented) The process according to claim 31 carried out at a temperature ranging from 220 to 330 °C.

Claims 36-48 (Cancelled).

49. (New) The process according to claim 1, wherein the hydrocarbon comprises skeleton isomerization of olefins.

50. (New) The process according to claim 1, wherein component A comprises a mixture of the FER zeolite in a quantity ranging from 5 to 30 % by weight with respect to the

total weight of the catalyst and phosphorous in a quantity ranging from 0.1 to 10 % by weight with respect to the total weight of the catalyst.